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US Army Corps
of Engineers
Little Rock District

CULTURAL RESOURCES SURVEY

SUNLIGHT BAY RECREATIONAL AREA
NIMROD LAKE, ARKANSAS

BY

AUBRA L. LEE AND ANNE FRANCES GETTYS

ARCHEOLOGICAL ASSESSMENTS REPORT NO. 59

SUBMITTED TO

LITTLE ROCK DISTRICT, CORPS OF ENGINEERS

1986

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A cultural resources reconnaissance was conducted within a single parcel of Federal land containing approximately 98.30 acres in the vicinity of Nimrod Lake, Arkansas, for the purpose of assessing possible adverse impact of alternative road alignments. This investigation resulted in the discovery of two previously unrecorded archeological sites. Both sites contained prehistoric components; one site also contained a historic period component.

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It is recommended that testing of site 3YE295 be conducted to elucidate the nature of the extensive subsurface deposits at the site. Furthermore, it is also recommended that Alignment B be chosen as the preferred route. A meeting of Archeological Assessments personnel and U.S. Army Engineer District, Little Rock, officials at the site determined that Alignment B would avoid impact to 3YE295. The eastern limits of the site were marked with green metal posts to avoid inadvertent impact during the construction of the road.

ARCHEOLOGICAL ASSESSMENTS REPORT NO. 59

Cultural Resources Survey
Road Alignment Alternatives
Sunlight Bay Recreational Area
Nimrod Lake, Arkansas

by

Aubra L. Lee
and
Anne Frances Gettys

Submitted
to the
US Army Engineer District, Little Rock

Contract No. DACW03-86-D-0068
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ABSTRACT

A cultural resources reconnaissance was conducted within a single parcel of federal land containing approximately 98.30 acres in the vicinity of Nimrod Lake, Arkansas, for the purpose of assessing possible adverse impact of alternative road alignments. This investigation resulted in the discovery of 2 previously unrecorded archeological sites. Both sites contained prehistoric components; 1 site also contained an historic period component. It is recommended that testing of site 3YE295 be conducted to elucidate the nature of the extensive subsurface deposits at the site. Furthermore, it is also recommended that Alignment B be chosen as the preferred route. A meeting of Archeological Assessments personnel and US Army Engineer District, Little Rock, officials at the site determined that Alignment B would avoid impact to 3YE295. The eastern limits of the site were marked with green metal posts to avoid inadvertent impact during the construction of the road.

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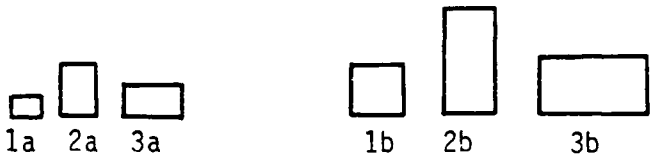
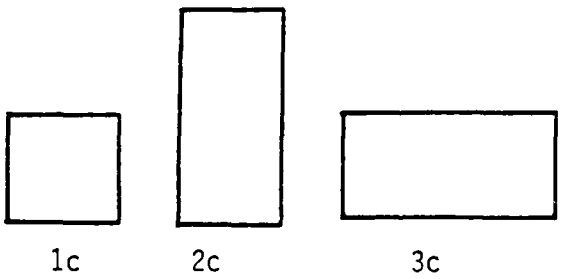
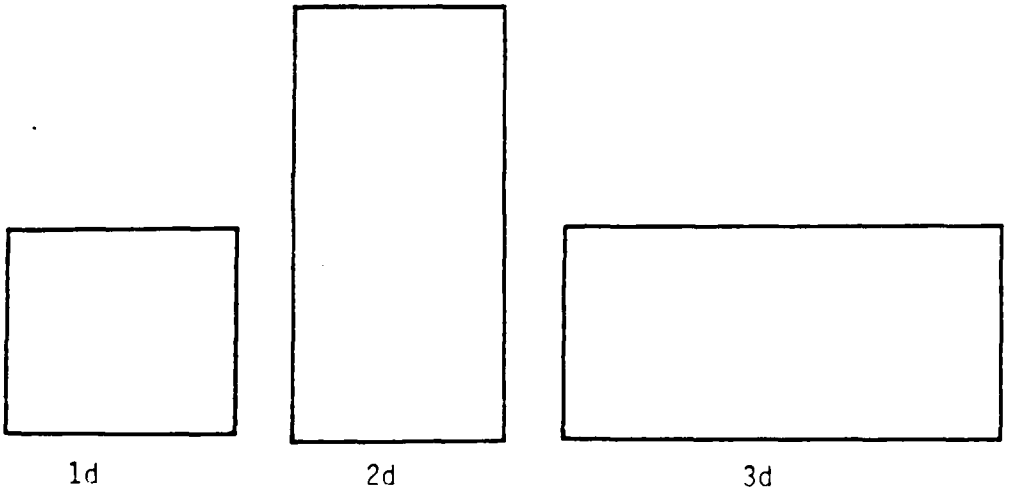
List of Abbreviations
and
Flake Size Chart

a = absent
c/n = chert/novaculite
cht = chert
hf = heat fractured
ht = heat treated
mod = modified
nov = novaculite
p = present

pc = present, cortex
pf = present, facetted
pq = present, quarry
ps = present, stream-rolled
pu = present, unidentified
pw = present, worn
qtz = quartzite
ss = sandstone
und = unidentified







Cultural Resources Survey
Road Alignment Alternatives
Sunlight Bay Recreational Area
Nimrod Lake, Arkansas

INTRODUCTION

Project Authorization

The investigations described below were conducted under the authority of and in compliance with the National Historic Preservation Act of 1980 (Public Law 96-515). In order to fulfill its responsibilities under this regulation, the US Army Engineer District, Little Rock contracted with Archeological Assessments, Inc. to complete a reconnaissance level cultural resources survey of selected portions of Nimrod Lake, Arkansas. The work was authorized under Contract No. DACW 03-86-D0068, Order Number 0003.

Project Location

The area to be surveyed consists of a single, irregularly shaped tract that contains a total of 98.30 acres. It is located 1.5 miles southwest of Plainview, Yell County, Arkansas and 0.5 miles northwest of Sunlight Bay Recreation Area (COE). Furthermore, it is also located within the flood pool stage of Nimrod Lake, Arkansas (373 feet AMSL). This unit is located north of the lake at normal pool of 342 feet AMSL (Figure 1).

Project Goals and Orientation

This effort was a traditional cultural resources survey of the irregular tract. The main goal was to locate, describe, and evaluate previously unrecorded archeological sites. The results were to be used to determine the relative significance of each site within a regional framework. These determinations were to guide recommendations for additional work at the site(s). The survey was initiated in response to possible adverse impacts from the proposed upgrading or realignment of Steve Road (Figure 2).

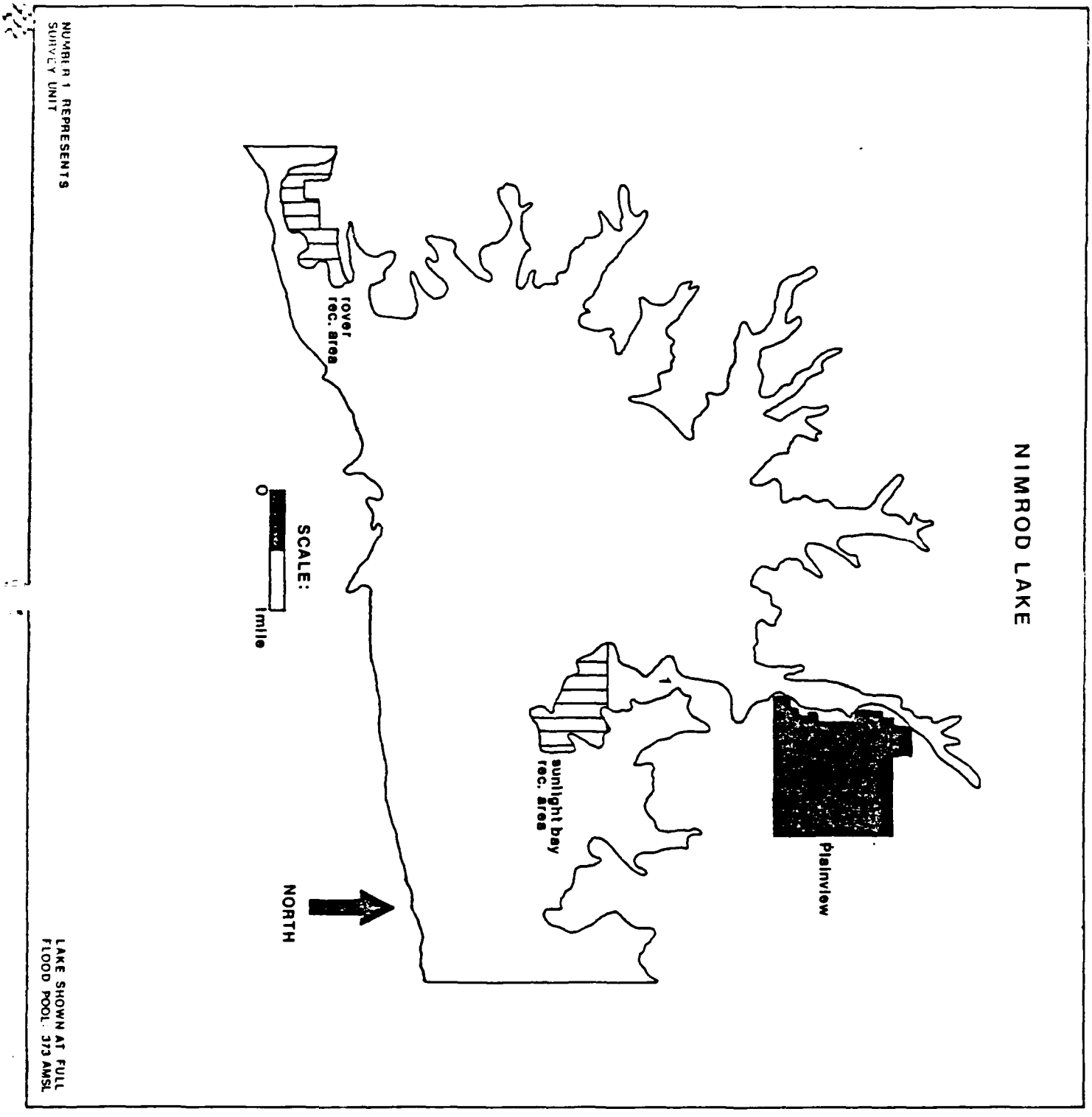


Figure 1. Nimrod Lake Vicinity Map.

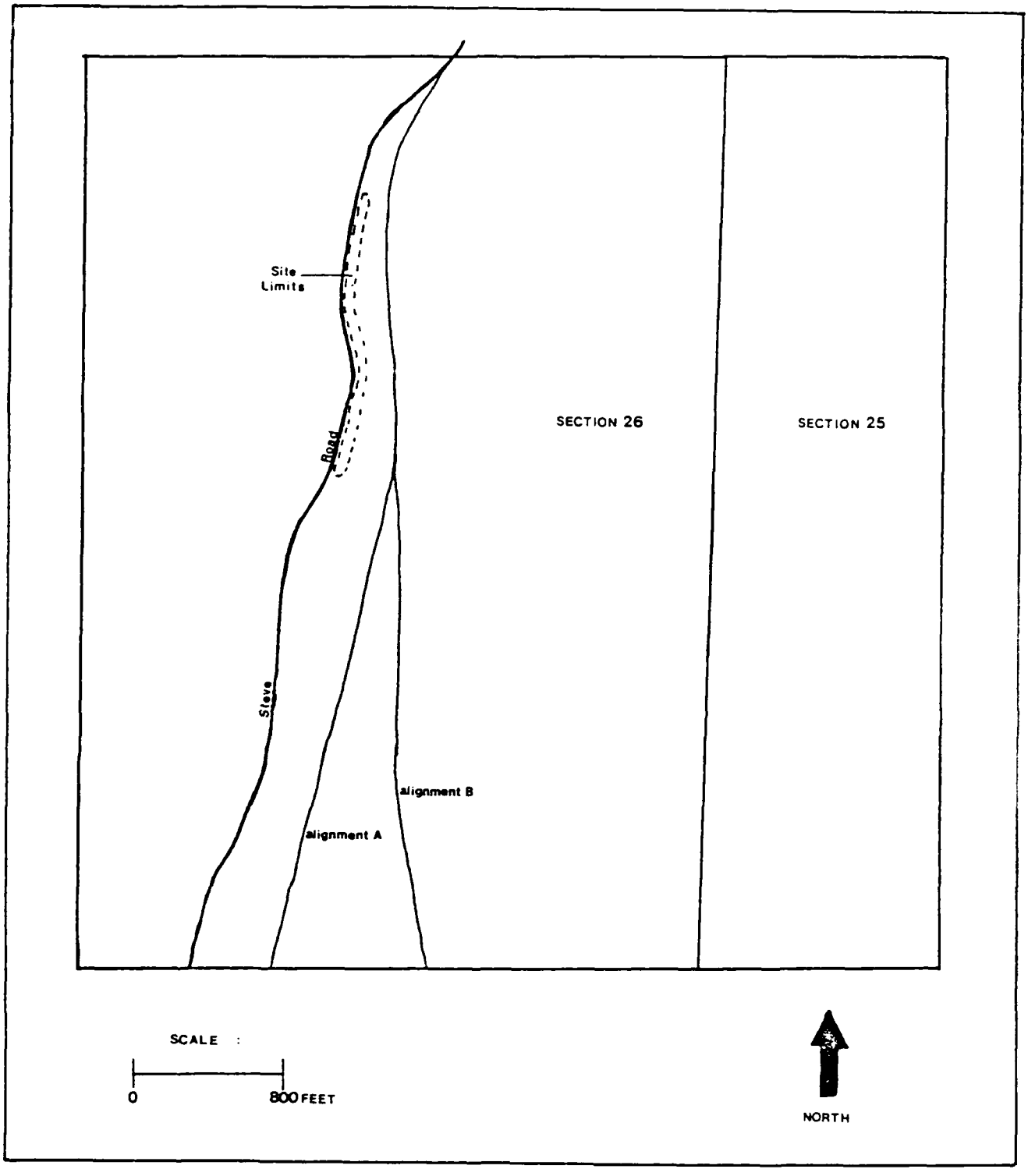


Figure 2. Site 3YE295 and Proposed Road Alignments.

SUMMARY OF INVESTIGATIONS

Several phases of work were completed during this project. These included a records check and literature review, an intensive pedestrian survey, and laboratory identification of recovered materials.

Background and Literature Research

A review of site location information in the US Army Engineer District, Little Rock, as augmeted by computer tie-in with the files of the State Archeologist, Fayetteville, Arkansas, revealed that no sites were presently recorded for the project area. However, numerous sites have been recorded for the Nimrod Lake area between 330-342 feet AMSL. A previous investigation of the shoreline area (Leatherman 1980) indicated that the general area was occupied from the Archaic Period through the Historic Period. Fifty-seven percent of the sites identified during that effort were interpreted as base camps; while 29% were interpreted as special activity locales. In addition, 10% of the known sites had unknown functions and 4% were isolated finds. Individual site significance was not assessed by the previous study; but, further work was recommended and included additional survey, initial testing, and mitigation of adverse impacts on cultural resources.

A literature review was conducted to synthesize data pertinent to previous archeological investigations in the study area by Aubra L. Lee. These investigations revealed that 187 previously recorded sites existed in various topographic settings such as terraces and meanders of the Fourche La Fave River and terraces associated with tributary streams of the river. The majority of these sites are being heavily impacted by shoreline erosion caused by wave action within the lake.

Pedestrian Survey

The pedestrian survey was conducted within the 98.30 acre tract north of Nimrod Lake. This survey was conducted from June 29, 1986 to June 30, 1986 and Aubra L. Lee served as field supervisor with field assistance provided by John D. Northrip and David Jarecke. The tract was assigned an individual Survey Unit number. The exact location of the Survey Unit is marked on a 7.5 minute quadrangle sheet and data describing the unit and the way in which it was surveyed is presented on an individual Survey Unit Form included with this report (Appendix I).

The survey methods applied to this area consisted of parallel, pedestrian transects using intervals of 50m and 75m between transects. Shovel testing was conducted at 50m intervals with the shovel tests measuring 30cm square

with a maximum depth of 50cm below ground surface. The backdirt from these tests was troweled to recover artifacts. Access to the survey unit was accomplished by using road transportation.

When a site was located, surface or subsurface, the shovel test interval was reduced to 10m to determine the horizontal and vertical limits of each site. A select surface collection was gathered when possible to obtain a representative sample of artifact types present. Artifacts were given proveniences that included survey unit number, surface or subsurface, and shovel test number. Site limits and locations of all shovel tests were plotted onto site maps. Arkansas Archeological Survey site forms have been completed and are on file with the Little Rock District and the Office of the State Archeologist. A summary description of all sites along with a listing of materials recovered accompanies this report.

Laboratory Analysis

All recovered artifacts were processed under the direction of Anne Frances Gettys. The artifacts were initially sorted into two categories: prehistoric and historic. Prehistoric lithic artifacts were then subdivided into artifacts, flakes, and debris. Historic Period artifacts were identified as to raw material class, described, and an attempt was made to establish a chronological range for all identifiable artifacts.

In the artifact analysis, particular attention was given to the identification of raw material types used in the manufacture of stone tools. The most commonly identified material in the collections is novaculite. It is a dull, possibly opaque but more commonly translucent, cryptocrystalline material originating in the Arkansas Novaculite formation of the Ouachita Mountains. Colors range from gray and blue to green, yellowish, pink, and white. Quartz particles or veins and other impurities are common. Lustrous novaculite is believed to have been heated.

Novaculite stream gravels could be available in the project area. However, the cortex on collected materials is most often weathered; thus, it is believed that quarries or outcrops are the preferred sources for novaculite. The closest outcrops would be about 18 miles south or southeast of Nimrod Lake (Haley 1976).

The next most commonly identified lithic type is quartzite. Most quartzite in the collection is gray and relatively fine grained.

Zipper chert is green, tan, or light to dark blue in color; it is distinguished by translucency and by wide bands of white to gold oolites. Woodford chert is opaque with a wider range of color than Zipper, including tan, blue, red, green, yellow, brown, and black. Narrow bands of gold oolites are sometimes found. In some cases it was impossible to determine whether an item was chert or opaque novaculite; these are listed in the material culture descriptions as "chert/novaculite".

Sandstone, shale, and hematite are rarely identified in the collection and their appearance is sufficiently described by their names.

The Johns Valley Shale formation, which outcrops about 5 miles south of Nimrod Lake (Haley 1976), could have been the source for most non-novaculite lithic types. Banks (1984) discusses the availability of chert and quartzite gravels deposited in the Johns Valley formation and now eroding out in the northern Ouachita Mountains.

Data Analysis

Data related to site characteristics were placed into a computerized data base management system (dBase II). These data included site number (state and field), quadrangle sheet location, landform type, cultural affiliation, nature of the deposits, areal extent, depth, and site condition. This systemic approach was used to generate the tables presented below discussing chronological assignations, site distribution, and site evaluation.

GEOLOGIC AND PHYSIOGRAPHIC CONTEXT

The project area is located within the Ouachita Mountains Region of west-central Arkansas, Yell County, near the north boundary of the Fourche subdivision of the Ouachita uplift. A general topographic schematic of the area may be characterized as a series of east-west trending mountains with flat ridge tops and stream channels located in the adjacent valleys (Stone 1977). Elevations range from 342 to 1350 feet above mean sea level (AMSL). Ridges are formed from the lower and middle members of the Atokan Formation Sandstone with the valley formed from the less resistant shales (Haley 1976). At the Nimrod Dam Overlook, the sandstone near the top of the lower Atokan Formation has been thrust northward over the Middle Atokan Shale along the Fourche La Fave River Fault Zone. Traces of clear to milky, drusy quartz were observed along some fractured sandstone surfaces. Folds at Nimrod Dam appear to be typical valley and ridge type folds, inclined northward, and are associated with south-dipping thrust faults (Stone, Haley and Viele 1973).

The major stream in the study area is the Fourche La Fave River which flows west to east in the valley between Fourche Mountain to the south and Ola and Danville Mountains to the north. Associated with the river are numerous tributary streams, meander scars, and relict channels. The floodplain is relatively flat except where it is cut by both intermittent and permanent tributaries of the Fourche La Fave River (Leatherman 1980:9). Stream terraces are recognizable in some locations, but many have been altered by agricultural and construction activities. Also, erosion has isolated "Islands" of higher relief within the floodplain. These "Islands" were once part of the lower ridge slopes bordering the older relict floodplain but, have become detached due to erosional attrition.

THE ARCHEOLOGICAL CONTEXT

Previous Archeological Investigations

Warren G. Moorehead (1931) conducted the first archeological study within the Nimrod Lake vicinity. Moorehead plotted several sites in Yell County but, unfortunately for future researchers, the descriptions and locations were general and often vague and supplied very little substantive information on the area.

Robert Greengo, sponsored by the River Basin Salvage Program of the Smithsonian Institution, surveyed portions of the Arkansas River Valley and located 55 sites. These sites ranged from the Archaic to the Mississippian Period and Greengo was positive that some of these sites may be related to the well known Carden Bottoms Complex (Greengo 1957).

Daniel Wolfman, Station Archeologist, conducted a limited survey of the South Fourche La Fave River. His survey located two small lithic scatters of unknown affiliation (Wolfman 1974).

Jeff Flenniken, Arkansas Archeological Survey, conducted two surveys within the South Fourche La Fave River area. Only three sites of unknown age or affiliation were located during these two surveys (Flenniken 1974a and 1974b).

Thomas L. Leatherman, of the Arkansas Archeological Survey, has conducted the only systematic survey within the confines of Nimrod Lake. Leatherman recorded 187 sites that ranged from the Archaic to the Historic Period. Surface collections were made at 176 of these sites while no subsurface investigations were performed at any of the sites. He assigned functional interpretations of base camps and special activity loci to 86% of the sites. Individual site significance was not assessed but he recommended an encompassing program of additional survey, initial testing, mitigation, and monitoring of high erosion areas of the lake (Leatherman 1980).

Cultural Historical Framework

The following culture period descriptions have been extracted from Leatherman (1980) and Bennett *et al* (1986). From this, it is hoped that a fairly concise and accurate view of the Paleo-Indian, Dalton, Archaic, Woodland, and Mississippian Cultures will be presented. The period synopses will focus on societal level, economy, and artifact assemblages.

Paleo-Indian (12,000-8,000 B.C.). This period is thought to represent an egalitarian band level society based on a highly nomadic hunting tradition. These hunters followed the migrating herds of late Pleistocene megafauna inhabiting North America. No components are known for the study area; but, fluted points have been documented in private collections and recovered as isolated finds (Davis 1967). The Clovis point type is associated with this group. Artifacts associated with the Clovis are: snub-ended scrapers, side scrapers, knives, drills, groovers, graving tools, abraders, and grinding stones. These artifact classes have been recovered outside the study area.

Dalton (8,000-7,000 B.C.). The period is now thought to be a transitional state between the early Paleo-Indian and later Archaic Culture. They continued the nomadic, band level society; but, they hunted the new, smaller Holocene fauna. In addition, an expanded tool complex seems to indicate foraging for floral specimens. The Dalton point is considered highly diagnostic of this period. Additional artifacts associated with the point are: adzes, spokeshaves, steep-edged scraping and cutting tools, bone needles and awls, snub-ended scrapers, mortars, manos, and grinding slabs. No components of this period have been located within the study area.

Archaic (7,000-1,000 B.C.). The Archaic Period represents a gradual shift to a semi-nomadic hunting and gathering tradition with an intensification of regional exploitation of ecozones. During this period, point style proliferation and variation is interpreted as a regionalization of band level society. Point types of this period are: Agate Basin, Bulverde, Big Sandy, Ellis, Ensor, Johnson, Stone, Square stemmed, Gary, Marcos, and Williams. Associated artifacts are flake knives, biconvex scrapers, expanding stem drills, utilized flakes, pebble hammerstones, adzes, bannerstones, fishhooks, and gorgets.

Woodland (1,000 B.C.-900 A.D.). This period represents a hypothesized population increase based on semi-sedentary horticulture. The horticulture was based upon the gathering of and/or nurturing of Sumpweed, Sunflower, and Chenopodium among others. This economic base allowed for increased trade and regional interaction. Pottery, clay tempered variety, and the bow and arrow were introduced during this timeframe. Pottery was plain (Williams Plain), incised, dentate stamped or punctated. A single example of red filmed pottery has been reported (Hoffman 1977). Increased ceremonialism is evident in the occurrence of burial mounds, specialized artifact classes, and personal adornment objects. Projectile points attributed to this period are: Gary, Ellis, Edgewood, and Scallorn. Associated artifacts are rectangular spades, bifaces, choppers, cores, hammerstones, manos, boatstones, bone debris, shell beads, flake knives, utilized flakes, scrapers, and platform pipes.

Mississippian (900-1700 A.D.). This period represents a chiefdom level society based on maize agriculture. There is an increase and stratification of the population. Specialized classes and unequal wealth distribution are hallmarks of the society. Ceremonial mound centers were constructed and inhabited by a priestly order with support villages scattered about the landscape. Also, specialized extraction camps, exotic trade, and discreet activity areas are noted. Shell was introduced as a tempering agent for an elaborate ceramic complex along with an increase in personal adornment items. Projectile points of this period are: Fresno, Reed, Scallorn, and an unnamed triangular form. Associated artifacts are expanding stem drills, scrapers, utilized flakes, manos, slab metates, boatstones, flint knives, axes, soapstone and shell beads, stone discs, bone and antler tools, and conch shell ornaments.

Historic Period (Ca 1700-Present). The establishment of the Arkansas Post marked the beginning of trade between the French and the local aboriginal populations. By the late 1700's regular trading had been established and the Spanish had made land grants as far up as present Franklin County. After control of this area passed to the United States, settlements were located as far upstream (Arkansas River) as Dardanelle. After the expulsion of indigenous populations, wave after wave of Anglo-American settlers came in and through the area. The population increased with the settlers depending on farming, logging, and mining for their livelihoods. This expansion period is characterized by rapid population growth centers in corridors paralleling the Arkansas River or navigable creeks. These centers later expanded to the rail lines constructed in the area. The expansion period is followed by a decline and partial abandonment of some locales that were once heavily populated.

RESULTS OF FIELD WORK

Area Examined

The 98.30 acres examined during this effort were contained within one survey unit. Observations made during the examination of this Survey Unit are included with this report as Appendix I. Survey Unit 1 contained two sites.

Sites Recorded

A total of two sites were located and described in this effort; 3YE295 and 3YE296. Both of the sites contained prehistoric materials, while one site, 3YE295, contained Historic Period materials. Table 1 contains a short description of each site. Full site descriptions are given on the appropriate Arkansas Archeological Survey site forms which have been filed with the Arkansas Archeological Survey and are included with this report. Tables 2 - 4 list and describe prehistoric and historic artifacts recovered from sites 3YE295 and 3YE296. Figure 3 shows chronologically diagnostic artifacts recovered from these sites.

Table 1. Site Descriptions

Site Number	Descriptions and Recommendations
3YE295	Heavy density, surface and subsurface lithic scatter located upon undulating, improved pastureland. Site dimensions are 600m x 100m. While the depth of the artifacts seemed to go only slightly below the plow zone there was a considerable concentration of materials. The upper portions of the landform have been disturbed by tree clearing but the area is now fallow. Raw material sources differed for different material types. Weathered (quarry or outcrop) cortex was the most common cortex type noted on novaculite, but it occurred only rarely. Stream cortex was recorded for one chert tool and for a few pieces identified as "chert/novaculite". Stream worn cortex is common on quartzite and sandstone tools and on quartzite flakes. Heat treatment of novaculite is indicated, but whether or not it was done on the site is undetermined. The manufacture of large bifaces from chert, novaculite, and quartzite is inferred from biface thinning flakes and biface fragments broken during production. The use of

Table 1. Site Descriptions (Continued)

Site Number	Descriptions and Recommendations

flake blanks for biface manufacture was tentatively inferred for two items; one is a possible resharpening flake. Small points were also produced here, as indicated by a small point preform on a flake.

One reason for biface manufacture was replacement of broken hafted tools (inferred from proximal fragments of large and small points). These hafted tools could have been intended for use on the site or to fill tool kits to be used elsewhere (for example, in hunting).

The use of biface tools on the site is inferred from the presence of resharpening flakes and discarded tool fragments with worn edges. Other tool use involved reuse of biface production failures; reuse of broken finished tools; and use of lithic debris (chunks and flakes) as incidental tools. Some functions of chipped stone tools can be inferred from tool or edge morphology: projectile point/knife; scraper; graver; drill; wedge, chisel, or punch; and spokeshave.

Possible use of anvil support in percussion flaking ("bipolar flaking") is inferred from sandstone and quartzite anvil stones and "bipolar" flakes. Sandstone, quartzite, and chert hammers could have been used in lithic reduction as well as other hammering activities. The sandstone and quartzite tools were also used as manos, possibly for processing vegetable food. One small grinding slab was also found.

Prehistorically, Late Archaic and/or Woodland as well as Caddoan occupations are inferred. Gary and Langtry point types are believed to date between 3000 B.C. and A.D. 850 (Bell 1958:38; Schambach 1982:173,191; Schambach _et al_ 1982:60-61). Two points, tentatively typed as Cahokia (Perino 1968:12) and Madison (Perino 1968:52), post-date A.D. 1900. The Scallorn or Reed point's time range overlaps those of the other point types, from A.D. 500 to 1500 (Bell 1958:76, 1960:84).

Heat fracture is common on tools, flakes, and debris. A few historic artifacts have also been burned. This may indicate deliberate use of fire during prehistoric and

Table 1. Site Descriptions (Continued)

Site Number	Descriptions and Recommendations
	historic occupations or uncontrolled burning of the area after material culture was deposited. Historic use of the area as a residence is inferred. Food serving and storage vessels are represented as well as one clothing item (a button), and nails may have come from structures. The presence of domestic poultry is inferred from several polished novaculite flakes and fragments believed to be "gizzard stones". Historic artifacts dating to the late 1800's or early 1900's were found. Glass lid liners were not in use before 1868 (Toulouse 1969:430) but were in common use in the early 20th century. Wire nails were generally available after 1887 (Lees 1977:102-103) and of course, could have been deposited much more recently. It is recommended that additional investigations be conducted at this site locale to determine its possible eligibility for nomination to the National Register of Historic Places.
3YE296	Very low density, subsurface lithic scatter located in undulating, improved pastureland. Site dimensions are 50m x 40m. From the presence of an arrow point preform, it is inferred that the locality was used during Woodland or Late Prehistoric times. Arrow point manufacture using flake blanks is the only activity inferable. No further work is recommended at this location.

Table 2. Lithic Artifacts: 3YE295

Material	Cortex	HF	Description
c/n	a	p	biface production failure; bifacial flaking, possibly on flake blank. Steep edge damage may be incidental from road traffic.
c/n	a	a	biface fragment, broken during use?; worn bifacial edge, bending fracture; incidental ? edge damage.
und cht	a	a	large point or knife midsection, broken during use, reused as scraper/graver; narrow biface midsection, rounded and damaged edges, bending fracture on one end. Other end is broken and steeply reworked. Relatively recent scars on both margins may be reworking or incidental damage.
nov	a	p	discarded biface tool fragment, broken by HF; *thin edge fragment, part of edge is rounded and worn.*
nov	a	a	biface production failure; biface end fragment, lateral snap break?, made on resharpening flake? (end of biface is facetted, worn platform; ventral face has been totally flaked to remove bulb).
nov	a	a	small point tip broken during use?; bending fracture, made on a flake?
nov	a	a	discarded large point stem, broken during use?; causes of breaks are undetermined.
c/n	a	p	large point or knife tip, discarded, broken by HF; rounded edge indicates use before discard.
nov	a	a	small Scallorn (?) or Reed (?) point stem, broken during use (Figure 3d).
qtz	ps	a	complete mano/anvil/hammer; stream pebble, 4 ground faces with pecked (and ground?) depression in each, battered edges and corners.

Table 2: Lithic Artifacts: 3YE295 (continued)

Material	Cortex	HF	Description
qtz	ps	a	broken mano/anvil,hammer; tabular pebble, 2 opposite faces ground and pecked (but no depressions), margins and corners battered.
nov	a	p	scraper fragment, HF after discard?; flake scars, steep unifacial damage and rounding on convex edge.
und	pu	p	discarded biface tool, HF after discarding?; bifacial flaking, part of edge is damaged and rounded, part may be resharpened.
qtz	a	p	shoulder of contracting stemmed point?, HF after discarding?; worn edge.
und cht	a	a	thin biface midsection? reused after breaking as a wedge or chisel?; bifacial flaking and battering on opposing edges.
Woodford?	ps	a	hammer or core?; stream pebble, battered cortex, all but 1 flake may be incidental to use as hammer.
qtz	ps	a	mano/anvil/hammer; stream pebble, 4 ground faces, pecking on 2 opposite faces (on one of these a depression is formed); battered margins and ends.
qtz	ps	p?	mano/hammer fragment; ground on at least one face, battered on end.
nov	a	p	scraper?; irregular chunk with unifacial edge modification.
nov	a	p	bifacial flake scars, broken by HF, crushed and battered edge opposite flat, broken surface.
ss	ps	p?	small metate/cupstone; broken tabular pebble, one lightly ground, concave, pecked surface; opposite face is eroded, possibly ground with depression in center.

Table 2: Lithic Artifacts: 3YE295 (continued)

Material	Cortex	HF	Description
qtz	ps	a?	mano/anvil/hammer; large pebble, ground on 2 opposite faces; both are also pecked (1 with a depression); other faces and corners are pecked.
und cht	a	p	discarded biface tool fragment, HF after discarding; thin biface edge fragment.
nov	a	a	Gary point broken during use; bending fracture; made on a flake with platform at proximal end, part of edge is rounded (Figure 3b).
ss/qtz	ps	a	hammer; small irregularly shaped pebble with battered ends.
nov	a	a	Cahokia? point, broken during use or manufacture; point made on flake, tip missing, bending fracture? (Figure 3c).
nov	a	p	biface production failure, reused?; edge fragment, minimal bifacial flaking; possible use damage on broken edge.
nov	a	p?	broken and discarded Madison ? arrow point base broken during shovel test; thin well-finished biface fragment; breaks resembles HF but also looks fresh - broken during recovery (Figure 3e).
c/n	a	p	discarded biface, later HF; edge fragment, part is heavily worn and part appears resharpened; break is HF.
nov	a	a	biface production failure, used after breaking; end fragment, HT, minimal flaking after HT; bending fracture? influenced by natural flaws. Ring crack on one face approximately 1cm from margin. Modification or use damage on broken edge continues around bifacial edge.
nov	a	p	reused fragment of discarded biface; edge fragment, broken by HF, reworked? by notching to form graver projection which is rounded.

Table 2: Lithic Artifacts: 3YE295 (continued)

Material	Cortex	HF	Description
nov	pq?	p	possible broken tool; fragment with possible edge damage and rounding from use, impact fracture in 2 places (incidental ?).
nov	a	p?	discarded tool fragment; biface edge fragment with damage and rounding use, breaks from HF and flaws in material.
nov	a	p?	large Gary (?) or Langtry (?) point broken during use?, reused on tip as a spokeshave ?; contracting stemmed or corner notched point, tip is reused after breaking (impact fracture?); part of straight, nicely finished edge seems rounded (use or platform preparation?); stem break may be HF (Figure 3a).
c/n	a	p	large point or knife, broken during production?; biface tip, break from HF, edges are straight but unworn.
nov	a	p	large point or dart fragment, HF after discarding?; thin biface edge fragment, breaks due to HF.
c/n	a	p	large point or knife fragment, reused as wedge, punch, or chisel; biface midsection, impact marks from opposing bifacial edges; lateral snap break?
c/n	pq	p	unidentified tool fragment; angular fragment with battered edge.
qtz	a	a	Gary (?) point broken during production ?; broken contracting stemmed point, sinuous edges, rounding uncertain.
qtz	a	a	biface production failure; biface edge, sinuous, undamaged, bending fracture.

Table 2: Lithic Artifacts: 3YE295 (continued)

Material	Cortex	HF	Description
c/n	a	a	large point or knife, broken during use ?; biface tip, relatively straight edge, sharp tip, rounding on tip and part of edge, break from blow in center of one face.

Table 3: Lithic Artifacts: 3YE296

Material	Cortex	HF	Description
c/n	a	a	arrow point production failure; broken arrow point preform, unfinished tip is platform of a flake blank, bending fracture.

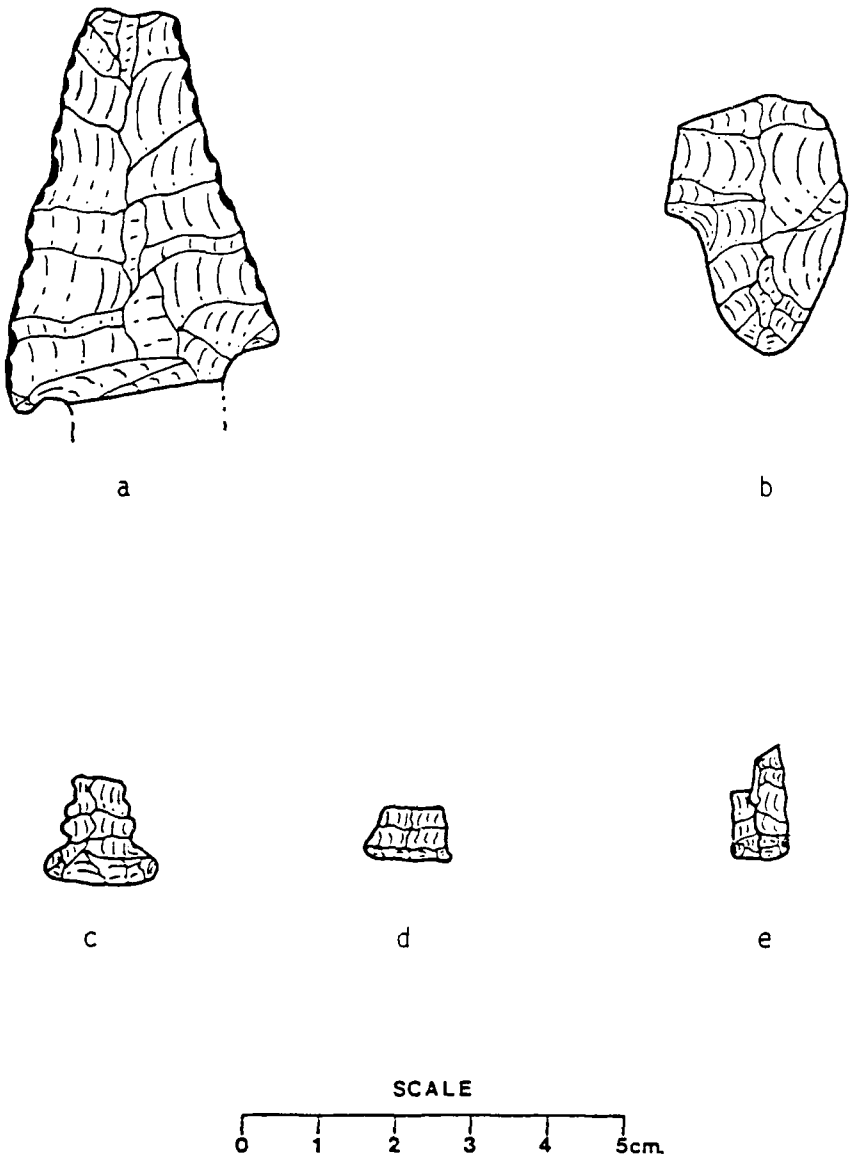


Figure 3. Lithic Artifacts.
a- Gary (?) or Langtry (?) point; b- Gary point; c- Cohokia (?) point; d- Scallorn (?) or Reed (?) point stem; e- Madison (?) arrow point base. (a-e: 3YE295).

Table 4. Historic Artifacts: 3YE295

Number	Description
	CERAMICS
2	matching burned whiteware bowl sherds
1	burned whiteware bowl base sherd, same vessel as above
1	whiteware rim sherd, possibly matching above
3	whiteware rim sherds
1	whiteware body sherd
1	porcelain body sherd
1	whiteware sherd
2	matching whiteware fragments
1	whiteware sherd
1	whiteware rim sherd from cup
2	matching whiteware fragments
1	stoneware or earthenware vessel sherd, Bristol/Bristol glazed
1	porcelain button
2	whiteware plate base fragments
1	whiteware sherd
	METALS
3	wire nails, 5.2cm long
2	wire nails, 6.0cm long
1	wire nail, 6.2cm long
1	wire nail, 6.5cm long
1	wire nail, 6.6cm long
1	wire nail, 7.0cm long
1	wire nail, 11.5cm long
1	wire nail, 15cm long
1	broken wire nail, 5.0cm long
1	broken wire nail, 6.5cm long
1	unidentified broken nail, 3.0cm long

Table 4. Historic Artifacts: 3YE295 (continued)

Number	Description
	GLASS
1	clear vessel fragment
1	white milk glass lid liner fragment, embossed GENUINE
1	white milk glass lid liner fragment, embossed FO
3	white milk glass lid liner fragments
1	clear glass fragment
1	white milk glass lid liner fragment, HF
1	clear glass vessel fragment
1	clear glass vessel fragment from rectangular vessel
1	greenish window pane fragment
1	brown glass vessel base fragment
2	clear glass vessel fragments
1	greenish window pane fragment
1	clear vessel fragment from rectangular vessel
	OTHER
1	chert/novaculite gizzard stone (flake) ?
1	chert/novaculite gizzard stone broken flake) ?
9	novaculite flakes probably passed through poultry gizzard ?; all edges are worn smooth; all are 1/2 inch or less in maximum dimension

RECOMMENDATIONS

Survey Unit Evaluation

A single survey unit was examined at the reconnaissance level as described above in the vicinity of Nimrod Lake. This research resulted in the location of 2 previously unrecorded sites. These sites have a chronological range beginning in the Archaic Period and ending with the Historic Period.

It is recommended that no further site location activities be conducted within these areas.

Site Evaluation

Of the 2 sites recorded for this parcel 3YE295 was judged to contain intact deposits. It is our judgment that further work at this site will result in the recovery of further significant scientific or cultural data due to the extensive subsurface deposits and the relative paucity of subsurface investigations in or near the Nimrod Lake area. Therefore, further archeological investigations are recommended for this site.

Route Evaluation

Of the three alternative routes proposed, it is our judgment that alignment B be selected due to its cost effectiveness and its minimal impact upon cultural resources located in the vicinity.

Management Meeting

A meeting to assess possible project impacts caused by road construction along Alignment B was held at the site on August 8, 1986. Those present included Mr. Robert Dunn, Archeologist for the US Army Engineer District, Little Rock, Mr. Lon Keallar, Resident Manager, Nimrod Lake, and W. J. Bennett, Jr., and Aubra Lee of Archeological Assessments. At that time the eastern limits of 3YE295 were staked with green metal posts. This line will serve as a boundary for road construction activities and thus secure the site from inadvertent impact during construction.

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APPENDIX I

SURVEY UNIT FORM

Survey Unit: 1

Quad Sheet: Plainview, AR, 7.5'

Terrain: Ranges from undulating on western periphery to relatively flat on the eastern side. Major portion of unit is improved pastureland with wooded areas located in west 1/2 of unit. Slash Pine Plantation (1951) is located in southeast part of unit.

Vegetation: Improved pastureland for most part with wood area that consists of mixed hardwoods and pine. Also 1951 Slash Pine Plantation.

Soil Description(s): Soil Profile 1: 0-3cm, root zone; 3-15cm, plow zone/light brown silt w/sandstone; 15-25cm, light brown/brown silt w/sandstone; 25-40cm, red brown silt w/sandstone. Soil Profile 2: 0-3cm, root zone; 3-32cm, red brown silt w/sandstone; 32-50cm, red brown silt clay w/sandstone in upper 7cm and FeMn concretion. Soil Profile 3: 0-3cm, root zone; 3-31cm, light brown silt w/FeMn concretions and sandstone; 31-63cm, red brown silt clay w/sandstone and FeMn concretion.

Sites Recorded: 3YE295 and 3YE296

Isolated Finds: 0

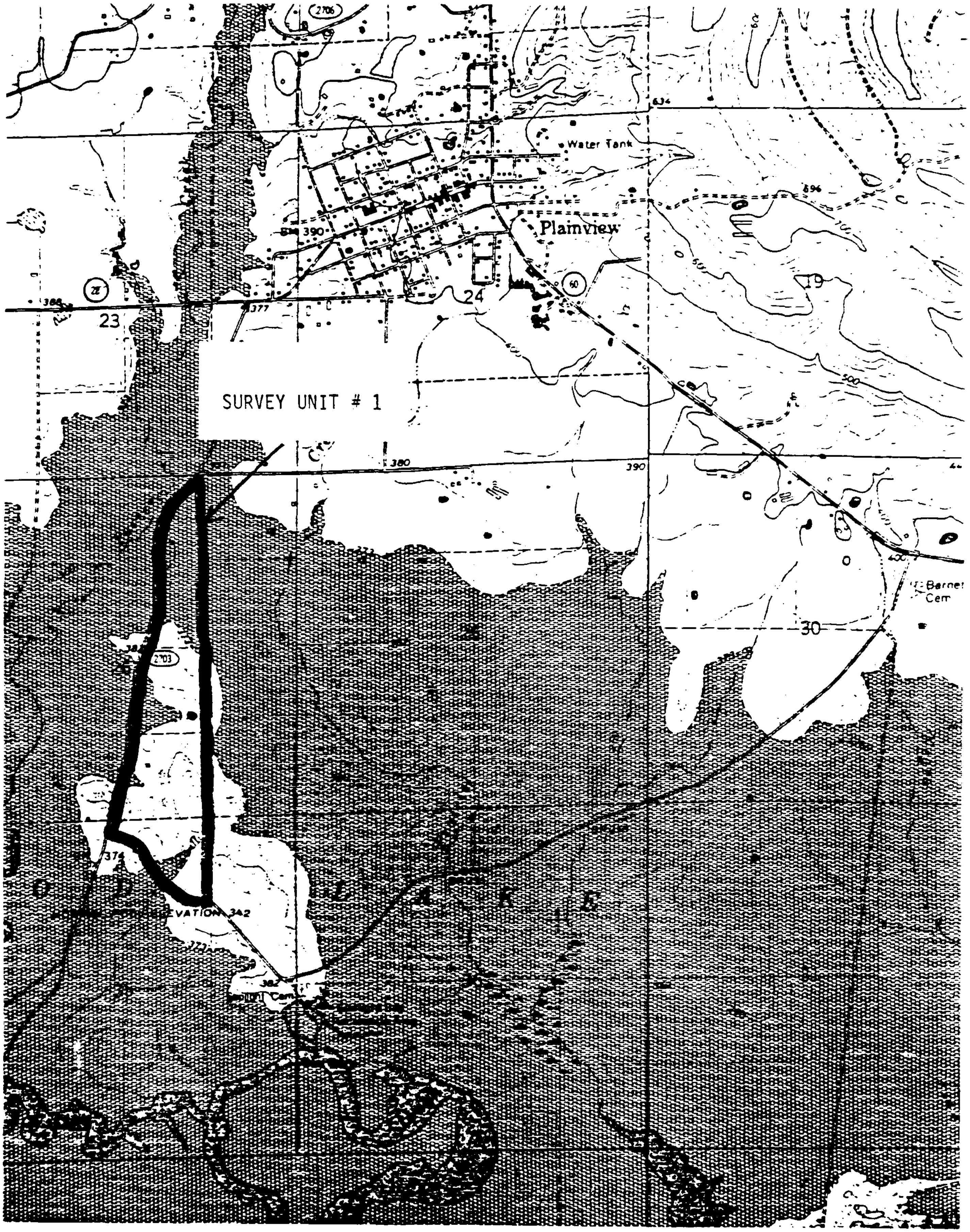
General Visibility: Poor to fair due to differential ground cover in pastureland and forested areas.

Special Hinderances to Site Location: Landclearing, cultivation, contouring of hill and slope and slope erosion. Also Pine Plantation.

Special Observations: Corps of Engineers food plot #7 located in northwest portion of unit. Topographic high near middle of Sec. 26 has been contoured to slow slope erosion. Small structure shown in southeast quadrant of Sec. 26 has been removed. Upper 10-20cm of soil sun baked, very hard.

Survey Strategy: Parallel transects with 50 or 75 meters between surveyors. Shovel test interval of 50 meters. Transects were oriented north to south and south to north.

Surveyor(s): Lee, Northrip and Jarecke Date: 6/29-30/86


SURVEY UNIT # 1
Plainview
Water Tank
Barnet Cem
23
24
19
30
380
390
377
2703
ELEVATION 342

APPENDIX II

FLAKES RECOVERED

Site 3YE295

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	Zipper	1d	p	ps	mod., thinning
16	c/n	-	a	a	
6	c/n	-	a	a	HF
1	c/n	-	a	a	HF, mod
2	c/n	-	a	a	HF, mod ?
1	c/n	-	a	a	HF, thinning
1	c/n	-	a	a	mod., thinning
4	c/n	-	a	a	thinning
1	c/n	-	a	pu	
1	c/n	-	a	pu	HF
4	c/n	-	p	a	
1	c/n	-	p	a	thinning
2	c/n	-	pf	a	
1	c/n	-	pf	a	mod
1	c/n	-	pf	a	mod, thinning
1	c/n	-	pf,pw	a	thinning
1	c/n	-	pw	a	
1	c/n	-	pw	a	resharpening
1	c/n	-	pw	a	resharpening?
1	c/n	1b	a	a	
1	c/n	1c	pw	a	thinning or resharpening
1	c/n	2b	pw	a	thinning
1	c/n	2c	a	a	thinning
1	c/n	2c	p	ps	platform edge is battered
71	nov	-	a	a	
26	nov	-	a	a	HF
1	nov	-	a	a	HF, HT
1	nov	-	a	a	HF, edge mod after HF
1	nov	-	a	a	HF, incidental damage?
1	nov	-	a	a	HF, mod
5	nov	-	a	a	HF, thinning
2	nov	-	a	a	HF?
7	nov	-	a	a	HT
1	nov	-	a	a	HT, mod (scraper)
4	nov	-	a	a	HT, thinning
2	nov	-	a	a	HT?
1	nov	-	a	a	bif. mod.(sm pt preform?)
1	nov	-	a	a	bipolar?
1	nov	-	a	a	mod
1	nov	-	a	a	mod (scraper?)
1	nov	-	a	a	mod, scraper
1	nov	-	a	a	mod.

FLAKES RECOVERED (cont'd)

Site 3YE295

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
2	nov	-	a	a	mod?
9	nov	-	a	a	thinning
1	nov	-	a	a	thinning, mod
1	nov	-	a	pq	
8	nov	-	p	a	
2	nov	-	p	a	HF
2	nov	-	p	a	HT, mod
1	nov	-	p	a	mod?
5	nov	-	p	a	thinning
2	nov	-	pf	a	
2	nov	-	pf	a	HF
1	nov	-	pf	a	HF, resharpening
1	nov	-	pf	a	HT
1	nov	-	pf	a	mod?
3	nov	-	pf	a	thinning
1	nov	-	pf	pq	
2	nov	-	pf,pw	a	
1	nov	-	pf,pw	a	HT, resharpening?
1	nov	-	pf,pw	a	end thinning/resharp,mod
1	nov	-	pf,pw	a	mod., HF
1	nov	-	pf,pw	a	resharpening
4	nov	-	pf,pw	a	resharpening?
5	nov	-	pf,pw	a	thinning or resharpening
1	nov	-	pf,pw	pq	resharpening?
2	nov	-	pw	a	
1	nov	-	pw	a	HF?
1	nov	-	pw	a	resharpening
2	nov	-	pw	a	resharpening?
2	nov	1b	a	a	
2	nov	1b	a	a	thinning
2	nov	1b	p	a	
1	nov	1b	p	a	HT
1	nov	1b	pf,pw	a	thinning or resharpening
1	nov	1b	pw	a	
3	nov	1c	a	a	
1	nov	1c	p	a	
1	nov	1c	p	a	battered platform
1	nov	1c	pc	pq	
1	nov	1c	pc	pu	mod., drill?
1	nov	1c	pf,pw	a	
1	nov	1c	pw	pq	resharpening
1	nov	1d	p	pq	

FLAKES RECOVERED (cont'd)

Site 3YE295

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	nov	1d	pf,pw	a	HT,scraper reshrp,DRP,mod
1	nov	1d	pw	a	mod, scrpr resharp/thinng
2	nov	2b	a	a	
1	nov	2b	p	a	HT, thinning
1	nov	2b	pf	a	HT
1	nov	2b	pf,pw	a	HF, HT
1	nov	2c	a	pq	HT, thinning
1	nov	2c	p	a	thinning
1	nov	2c	pf,pw	a	resharpening?
1	nov	2c	pf,pw	a	thinning or resharpening
1	nov	2c	pw	a	HF, resharpening?
1	nov	3b	pf	a	
1	nov	3b	pf	a	HT?
1	nov	3b	pf	a	thinning
1	nov	3c	a	a	
1	nov	3c	pw	a	thinning or resharpening
6	qtz	-	a	a	
1	qtz	-	a	a	incidental damage
3	qtz	-	p	a	
1	qtz	-	p	pu	
1	qtz	-	pf	a	
1	qtz	2c	p	a	thinning
1	qtz	2d	p	ps	
1	qtz	2d	pq	ps	
1	qtz	3b	p	a	
1	und cht	-	a	a	bipolar?
1	und cht	-	a	a	thinning
1	und cht	-	a	a	thinning, mod
1	und cht	-	pf,pw	a	thinning or resharpening
1	und cht	-	pw	a	HF,thinning/resharpening
1	unid	-	a	a	